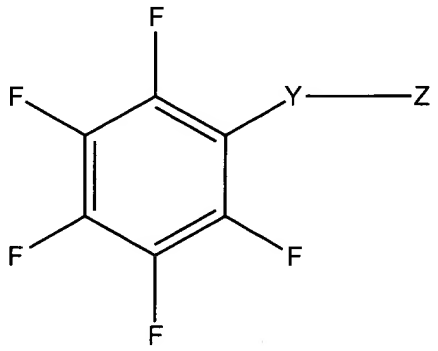
Amendments to the Claims

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

Claim 1 (Previously Presented) A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound of formula I:



I

or a pharmaceutically acceptable salt thereof, wherein:

Y is –S(O) or $-S(O)_2-$; and

Z is $-NR^1R^2$; wherein R^2 is optionally substituted heteroaryl and R^1 is selected from hydrogen

substituted or unsubstituted (Cl-C10)alkyl,
substituted or unsubstituted (C1-C10)alkoxy,
substituted or unsubstituted (C3-C6)alkenyl,
substituted or unsubstituted (C2-C6)heteroalkyl,
substituted or unsubstituted (C3-C6)heteroalkenyl,
substituted or unsubstituted (C3-C6)alkynyl,
substituted or unsubstituted (C3-C8)cycloalkyl,
substituted or unsubstituted (C5-C7)cycloalkenyl,
substituted or unsubstituted (C5-C7)cycloalkadienyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aryloxy,
substituted or unsubstituted aryl-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(C5-C7)cycloalkenyl,

substituted or unsubstituted aryloxy-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(Cl-C4)alkyl,

substituted or unsubstituted aryl-(C1-C4)alkoxy,

substituted or unsubstituted aryl-(C3-C6)alkenyl,

substituted or unsubstituted aryloxy-(C1-C4)alkyl,

substituted or unsubstituted aryloxy-(C2-C4)heteroalkyl,

substituted or unsubstituted heteroaryl,

substituted or unsubstituted heteroaryloxy,

substituted or unsubstituted heteroaryl-(C1-C4)alkyl,

substituted or unsubstituted heteroaryl-(Cl-C4)alkoxy,

substituted or unsubstituted heteroaryl-(C1-C4)heteroalkyl,

substituted or unsubstituted heteroaryl-(C3-C6)alkenyl,

substituted or unsubstituted heteroaryloxy-(CI-C4)alkyl, and

substituted or unsubstituted heteroaryloxy-(C2-C4)heteroalkyl,

provided that:

in the case that Y is $-S(O_2)-$, and R^1 is hydrogen or methyl, then R^2 is substituted heteroaryl group:

in the case that Y is $-S(O_2)-$, and R^2 is a ring system chosen from 5-quinolyl, or 4-pyridyl, then either R^1 is not hydrogen or R^2 is substituted by at least one substituent that is not hydrogen;

in the case that Y is $-S(O_2)-$ and R^2 is 2-methylbenzothiazol-5-yl, 6-hydroxy-4-methyl-pyrimidin-2-yl, 3-carbomethoxypyrazin-2-yl, 5-carbomethoxypyrazin-2-yl, 4-carboethoxy-l-phenylpyrazol-5-yl, 3-methylpyrazol-5-yl, 4-chloro-2-methylthiopyrimidin-6-yl, 2-trifluoromethyl-l-,3-,4-thiadiazol-5-yl, 4-methylthiazol-2-yl, 6,7-dihydroindan-5-yl, 7-chloro-5-methyl-l,8-naphthyridin-2-yl, 5,7-dimethyl-1,8-naphthyridin 2-yl, or 3-cyanopyrazol-4-yl, then R^1 is a group other than hydrogen.

Claim 2 (Previously presented) The composition of claim 1 wherein

Y is $-S(O)_2-$.

Claim 3 (Previously Presented) The composition of claim 2, wherein R^1 is hydrogen or lower alkyl, and R^2 is optionally substituted pyridyl.

Claim 4-10 (Canceled)

Claim 11 (Previously Presented) The composition of claim 1, wherein the compound is 5-Pentafluorophenylsulfonamidoindazole, or 5-Pentafluorophenylsulfonamidoindole.

Claim 12-17 (Canceled)

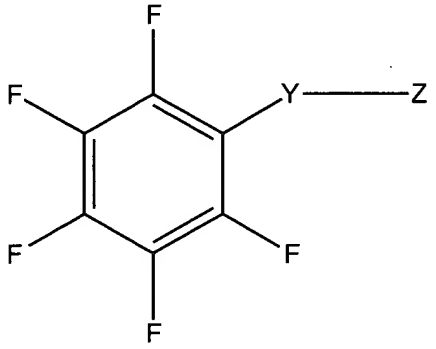
Claim 18 (Previously presented) The composition of claim 1, wherein the compound is selected from the group consisting of 4-Methyl-6-methoxy-2-pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-Pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; 5-Pentafluorophenylsulfonamidobenzo[a]thiophene; 5-Pentafluorophenylsulfonamidobenzo[a]furan; 5-Pentafluorophenylsulfonamidoindazole; 2-Methoxy-5-Pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claims 19-40 (Canceled)

Claim 41 (original) The composition of claim 2, wherein R^1 is an optionally substituted (C2-Cl0)alkyl or optionally substituted (C2-C6)heteroalkyl.

Claim 42 (Canceled)

Claim 43 (Previously presented) A method of treating a disease state characterized by abnormally high low density lipoprotein particles or cholesterol levels in the blood selected from the group consisting of atherosclerosis, pancreatitis, hypercholesterolemia and hyperlipoproteinemia, which method comprises administering to a mammalian subject in need thereof a therapeutically effective amount of a composition containing a compound of formula I:



I

or a pharmaceutically acceptable salt thereof, wherein:

Y is -S(O)- or -$S(O)_2$-;

Z is -NR^1R^2; where R^2 is optionally substituted heteroaryl and R^1 is selected from

hydrogen,

substituted or unsubstituted (Cl-C10)alkyl,

substituted or unsubstituted (C1-C10)alkoxy,

substituted or unsubstituted (C3-C6)alkenyl,

substituted or unsubstituted (C2-C6)heteroalkyl,

substituted or unsubstituted (C3-C6)heteroalkenyl,

substituted or unsubstituted (C3-C6)alkynyl,

substituted or unsubstituted (C3-C8)cycloalkyl,

substituted or unsubstituted (C5-C7)cycloalkenyl,

substituted or unsubstituted (C5-C7)cycloalkadienyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aryloxy,

substituted or unsubstituted aryl-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(C5-C7)cycloalkenyl,

substituted or unsubstituted aryloxy-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(Cl-C4)alkyl,

substituted or unsubstituted aryl-(C1-C4)alkoxy,

substituted or unsubstituted aryl-(Cl-C4)heteroalkyl,

substituted or unsubstituted aryl-(C3-C6)alkenyl,

substituted or unsubstituted aryloxy-(C1-C4)alkyl,

substituted or unsubstituted aryloxy-(C2-C4)heteroalkyl,

substituted or unsubstituted heteroaryl,

substituted or unsubstituted heteroaryloxy,

substituted or unsubstituted heteroaryl-(C1-C4)alkyl,

substituted or unsubstituted heteroaryl-(Cl-C4)alkoxy,

substituted or unsubstituted heteroaryl-(C1-C4)heteroalkyl,

substituted or unsubstituted heteroaryl-(C3-C6)alkenyl,

substituted or unsubstituted heteroaryloxy-(CI-C4)alkyl, and

substituted or unsubstituted heteroaryloxy-(C2-C4)heteroalkyl,

provided that:

in the case that Y is $-S(O_2)-$, and R^1 is hydrogen or methyl, then R^2 is a substituted heteroaryl group:

in the case that Y is $-S(O_2)-$, and R^2 is a ring system chosen from 5-quinolyl, or 4-pyridyl, then either R^1 is not hydrogen or R^2 is substituted by at least one substituent that is not hydrogen;

in the case that Y is $-S(O_2)-$ and R^2 is 2-methylbenzothiazol-5-yl, 6-hydroxy-4-methyl-pyrimidin-2-yl, 3-carbomethoxypyrazin-2-yl, 5-carbomethoxypyrazin-2-yl, 4-carboethoxy-l-phenylpyrazol-5-yl, 3-methylpyrazol-5-yl, 4-chloro-2-methylthiopyrimidin-6-yl, 2-trifluoromethyl-l-,3-,4-thiadiazol-5-yl, 4-methylthiazol-2-yl, 6,7-dihydroindan-5-yl, 7-chloro-5-

methyl-l,8-naphthyridin-2-yl, 5,7-dimethyl-1,8-naphthyridin 2-yl, or 3-cyanopyrazol-4-yl, then R^1 is a group other than hydrogen.

Claim 44 (Previously presented) The method of claim 43 wherein

Y is $-S(O_2)-$.

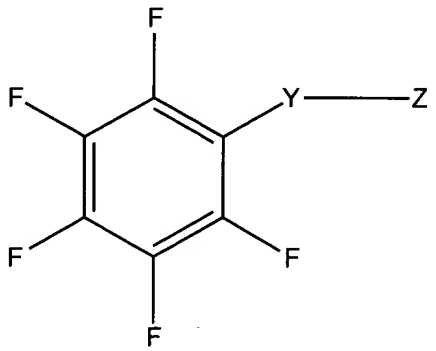
Claims 45-57 (Canceled)

Claim 58 (Original) The method of claim 43, wherein the composition is administered orally.

Claim 59 (Original) The method of claim 43, wherein the subject is human.

Claim 60 (Original) The method of claim 43, wherein the composition is administered in combination with a therapeutically effective amount of a hypolipemic agent or a hypocholesterolemic agent that is not represented by formula I.

Claim 61 (Previously Presented) A compound having the formula I:



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or a pharmaceutically acceptable salt thereof, wherein:

Y is $-S(O)-$ or $-SO_2-$; and

Z is $-NR^1R^2$; wherein R^2 is an optionally substituted heteroaryl group having only one or two heteroatoms in the heteroaryl ring system thereof, and R^1 is selected from

hydrogen,

substituted or unsubstituted (C2-C10)alkyl,

substituted or unsubstituted (C1-C10)alkoxy,

substituted or unsubstituted (C3-C6)alkenyl,

substituted or unsubstituted (C2-C6)heteroalkyl,

substituted or unsubstituted (C3-C6)heteroalkenyl,

substituted or unsubstituted (C3-C6)alkynyl,

substituted or unsubstituted (C3-C8)cycloalkyl,

substituted or unsubstituted (C5-C7)cycloalkenyl,

substituted or unsubstituted (C5-C7)cycloalkadienyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aryloxy,

substituted or unsubstituted aryl-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(C5-C7)cycloalkenyl,

substituted or unsubstituted aryloxy-(C3-C8)cycloalkyl,

substituted or unsubstituted aryl-(Cl-C4)alkyl,

substituted or unsubstituted aryl-(C1-C4)alkoxy,

substituted or unsubstituted aryl-(C3-C6)alkenyl,

substituted or unsubstituted aryloxy-(C1-C4)alkyl, and

substituted or unsubstituted aryloxy-(C2-C4)heteroalkyl,

provided that

in the case that Y is $-S(O_2)-$, and R^1 is hydrogen or methyl, then R^2 is a substituted heteroaryl group:

in the case that Y is $-S(O_2)-$, and R^2 is a ring system chosen from 5-quinolyl, or 4-pyridyl, then either R^1 is not hydrogen or R^2 is substituted by at least one substituent that is not hydrogen;

in the case that Y is $-S(O_2)-$ and R^2 is 2-methylbenzothiazol-5-yl, 6-hydroxy-4-methyl-

pyrimidin-2-yl, 3-carbomethoxypyrazin-2-yl, 5-carbomethoxypyrazin-2-yl, 4-carboethoxy-l-phenylpyrazol-5-yl, 3-methylpyrazol-5-yl, 4-chloro-2-methylthiopyrimidin-6-yl, 2-trifluoromethyl-l-,3-,4-thiadiazol-5-yl, 4-methylthiazol-2-yl, 6,7-dihydroindan-5-yl, 7-chloro-5-methyl-l,8-naphthyridin-2-yl, 5,7-dimethyl-1,8-naphthyridin 2-yl, or 3-cyanopyrazol-4-yl, then R^1 is a group other than hydrogen;
wherein said compound has pharmacological activity; and
with the proviso that heteroaryl is other than 4-pyrimidyl.

Claim 62 (Previously Presented) The compound of claim 61, wherein R^1 is hydrogen or lower alkyl, and Y is $-S(O_2)$.

Claims 63-94 (Canceled)

Claim 95 (Previously Presented) A pharmaceutical composition of claim 1, wherein R^1 is hydrogen or lower alkyl, and Y is $-S(O_2)$.

Claim 96 (Previously Presented) A method of claim 43, wherein R^1 is hydrogen or lower alkyl, and Y is $-S(O_2)$.

Claim 97 (canceled)

Claim 98 (Previously presented) **A** compound of claim 61, wherein the compound is selected from the group consisting of 5-Pentafluorophenylsulfonamidoindazole; 5-Pentafluorophenylsulfonamidoindole, 4-Methyl-6-methoxy-2-pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-Pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; 5-Pentafluorophenylsulfonamidobenzo[a]thiophene; 5-Pentafluorophenylsulfonamidobenzo[a]furan; 2-Methoxy-5-

Pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claim 99 (Previously presented) **A** method of claim 43, wherein the compound is selected from the group consisting of 5-Pentafluorophenylsulfonamidoindazole; 5-Pentafluorophenylsulfonamidoindole, 4-Methyl-6-methoxy-2-pentafluorophenylsulfonamidopyrimidine; 4,6-Dimethoxy-2-pentafluorophenylsulfonamidopyrimidine; 2-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidothiophene; 3-Pentafluorophenylsulfonamidopyridine; 4-Pentafluorophenylsulfonamidopyridine; 2-Chloro-5-Pentafluorophenylsulfonamidopyridine; 6-Pentafluorophenylsulfonamidoquinoline; 5-Pentafluorophenylsulfonamidobenzo[a]thiophene; 5-Pentafluorophenylsulfonamidobenzo[a]furan; 2-Methoxy-5-Pentafluorophenylsulfonamidopyridine; and 2-Anilino-3-pentafluorophenylsulfonamidopyridine.

Claim 100 (Previously presented) A compound of claim 61, wherein R^1 is an optionally substituted (C2-C10)alkyl or optionally substituted (C2-C6)heteroalkyl.

Claim 101 (Previously presented) A method of claim 44, wherein R^1 is an optionally substituted (C2-C10)alkyl or optionally substituted (C2-C6)heteroalkyl.

Claim 102 (Previously presented) A pharmaceutical composition of claim 1, wherein said compound is capable of increasing LDL receptor gene expression in a cell.

Claim 103 (Previously presented) A method of claim 43 wherein said compound is capable of increasing LDL receptor gene expression in a cell.

Claim 104 (Previously presented) A method of claim 43, wherein R^2 is a monocyclic heteroaryl group.

Claim 105 (Previously presented) A method of claim 43, wherein said R^2 heteroary group has only one heteroatom in the heteroaryl ring system.

Claim 106 (Currently Amended) A method of reducing the level of low density lipoprotein particles or cholesterol in the blood of a mammalian subject ~~in need thereof~~ suffering from a disease selected from the group consisting of atherosclerosis, pancreatitis, hypercholesterolemia and hyperlipoproteinemia, which method comprises administering to said subject a therapeutically effective amount of a composition containing a compound of Claim 61, whereby said level of low density lipoprotein particles or cholesterol is reduced.

Claim 107 (Previously presented) A method of claim 106, wherein the subject is human.

Claim 108 (Previously presented) A compound of claim 61, wherein heteroaryl is selected from the group consisting of 2-pyrrolyl, 3-pyrrolyl, 3-pyrazolyl, 2-imidazolyl, 4-imidazolyl, pyrazinyl, 2-oxazolyl, 4-oxazolyl, 5-oxazolyl, 3-isoxazolyl, 4-isoxazolyl, 5-isoxazolyl, 2-thiazolyl, 4-thiazolyl, 5-thiazolyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4--pyridyl, 2-pyrimidyl, 5-benzothiazolyl, purinyl, 2-benzimidazolyl, 5-indolyl, 1-isoquinolyl, 5-isoquinolyl, 2-quinoxalinyl, 5-quinoxalinyl, 3-quinolyl, and 6-quinolyl.

Claim 109 (Previously Presented) The compound of claim 108, wherein R^1 is hydrogen or lower alkyl, and Y is $-S(O_2)$.

Claim 110 (Canceled)

Claim 111 (Previously presented) The compound of claim 61, wherein R^1 is other than unsubstituted (C2-C10)alkyl.